

Title (en)

A fluidized catalytic cracking process and apparatus

Title (de)

Verfahren und Vorrichtung zur fluitizierten katalytischen Spaltung

Title (fr)

Procédé et appareillage de craquage catalytique fluidisé

Publication

EP 0908506 B1 20040721 (EN)

Application

EP 97307892 A 19971006

Priority

- EP 97307892 A 19971006
- US 84328797 A 19970411

Abstract (en)

[origin: EP0908506A1] An integral catalytic cracking process operates with its reactor and regenerator in a single vessel. It enables the direct heat transfer between the hydrocarbon vapours inside reactor and air in the regenerator. This direct heat transfer helps to run the reactor at much higher temperature and at the same time, reduces the regenerator temperature also. The lower regenerator temperature reduces catalyst deactivation due to metals and allows very heavy residue processing most economically which can not be processed in conventional residue crackers. The increased flexibility of the integral catalytic cracking process is derived from the synergistic combination of exothermic regeneration reaction and endothermic cracking reation integrally and thus controlling the unit heat balance in most efficient manner. Unlike conventional FCC unit, the hydrodynamics of the various sub sections in the integral cracking process namely riser, regenerator and the catalyst stripper are preferred to be in the fast fludization regime for optimal functioning of different delicate balances of the unit. <IMAGE>

IPC 1-7

C10G 11/18; **B01J 8/26**

IPC 8 full level

B01J 8/26 (2006.01); **C10G 11/18** (2006.01)

CPC (source: EP US)

B01J 8/26 (2013.01 - EP US); **C10G 11/18** (2013.01 - EP US)

Cited by

EP1996532A4; US8293961B2

Designated contracting state (EPC)

DE ES FR GB IT NL

DOCDB simple family (publication)

EP 0908506 A1 19990414; **EP 0908506 B1 20040721**; ES 2225937 T3 20050316; US 6027696 A 20000222

DOCDB simple family (application)

EP 97307892 A 19971006; ES 97307892 T 19971006; US 84328797 A 19970411